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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,768	02/25/2000	Randell L. Mills	62-226-ion	6782

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MANELLI DENISON & SELTER  
2000 M STREET NW SUITE 700  
WASHINGTON, DC 20036-3307

EXAMINER
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WELLS, NIKITA

ART UNIT	PAPER NUMBER
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2881

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/513,768

Applicant(s)

MILLS, RANDELL L.

Examiner

Nikita Wells

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-209 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-209 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/28/06
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The Applicant filed a "Response to Office Action Mailed January 30, 2006" (Paper #26) received July 28, 2006 in reply to the Non-Final Rejection (Paper #25) mailed out January 30, 2006. The Applicant previously filed a "Supplemental Response to Final Office Action, Second Request to Remove Finality of March 29, 2004 Final Office Action, and Request for Continued Examination" (RCE)(Paper #24) received April 28, 2005 under 37 CFR 1.114 in reply to the Final Rejection (Paper #22). The requests for withdrawal of all previous final rejections in (Paper #24) were found to be moot.

2. Applicant's arguments in the "Response to Office Action Mailed January 30, 2006 (Paper #26) have been fully considered but they are not persuasive. The Examiner analyzed the data and found the compelling experimental evidence to be insufficient as presented. The rejections as stated in the previous Office Action (Paper #25), mailed out January 30, 2006, are still applicable to the claims and are repeated here for clarification.

3. Receipt is acknowledged of information disclosure statements (IDS) submitted on July 28, 2006. However, the IDS is not in compliance with the provisions of 37 CFR §1.111(b), because a large majority of the references are without any relevance to the claimed invention. In order to comply with 37 CFR §1.111(b), the Applicant is obligated to submit only those references that are relevant to the invention. It is not the examiner's responsibility to sort out himself the pertinent ones. None of Applicant's publications provides any evidence for the existence of "hydrino", and/or hydrino-based reaction. All that is claimed by the Applicant is nothing else but vague speculation based on incorrect understanding of the physics underlying the observation (such as anomalous line broadening).

It is not necessary to submit a great number of references as listed in the latest IDS or previous IDS's, where in fact just a single reference would have been enough as a support for Applicant's claimed invention. Unfortunately, not a single one of Applicant's references has been able to provide the necessary evidence.

4. The burden of proof rests with the Applicant in that he has to show to the Examiner that the experimental evidence demonstrates the existence of a novel hydrogen species and compositions of matter comprising new forms of hydrogen which is based upon the binding energy being greater than that for normal hydrogen. The Examiner cannot correlate the experimental evidence of the spectral analysis as provided by the Applicant with the change in theory which substitutes the fractional integers for the whole integers in the formula for the binding energy (see equation no. 1 in the Specification) which would perturb the dimension of the Bohr radius, increase the binding energy, and subsequently demonstrate the existence of a novel form of a hydrogen species. The Applicant claims (see page 26, lines 9-26; and page 117, lines 26-33) that the release of energy from hydrogen as evidenced by the extreme ultra-violet (EUV) emission must result in a lower energy state of hydrogen. The Examiner considered the evidence, but questions the validity of the experiments.

***Claim Rejections - 35 USC § 101***

5. Claims 1-209 stand rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility. The invention is based upon assumptions that are contrary to basic, well established, laws of quantum physics and, therefore, is inoperative and lacks utility.

*Claim Rejections - 35 USC § 112*

6. Claim 1-209 stand rejected under 35 U.S.C. §112, first paragraph. Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Applicant claims that experimental data confirms that the existence of lower-energy atomic hydrogen (also referred to as "increased binding energy hydrogen" since the lower energy state results in a higher binding energy) is identified by extreme ultraviolet (EUV) spectroscopy conducted in numerous tests, which are disclosed in the Applicant's papers; and that this data demonstrates conclusively that the existence of lower energy hydrogen is not only a theoretical possibility, but is in fact a reality.

The Examiner considered the experimental evidence, but questions the validity of the experiments (as stated in the previous Office Action and Appendix). The experimental papers do not refer to the "hydrino" or to the possible existence of states of a lower-energy atomic hydrogen having fractional energy levels. However, as mentioned before and as reiterated in the attached appendix, the existence of these very weak peaks can be explained by external contamination or simply by unforeseen experimental error, and should not have lead the Applicant to construe the outlandish claim to the discovery of a new form of hydrogen (the hydrino) along with a theory which tries to explain its existence.

As to the anomalous hydrogen line broadening recited in the experimental papers and the Applicant's claim that this is evidence of the lower energy hydrogen, there are many other physically plausible explanations (see Appendix attached to the Advisory Action mailed May 7,

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2003), i.e. pressure broadening (due to high pressure within a hollow cathode), resonance broadening, microwave-field broadening, and many other broadening mechanisms which are fundamentally different than Applicant's "resonance broadening" due to hydrino levels. Thus, even if Applicant's hydrino hypothesis would be assumed as physically plausible, an explanation based on a new hypothesis in the presence of a number of other plausible reasons, is highly speculative. Consequently, the experimental data as presented in the technical papers, fails to convince the Examiner as to the possible existence of a lower-energy atomic hydrogen.

However, not only is the hydrino hypothesis highly speculative, but physically wrong, because it is based on many misunderstandings of conventional quantum mechanics, electromagnetic theory and the theory of relativity, as pointed out in detail in the Appendix cited.

### *Conclusion*

7. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

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1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The central fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nikita Wells, Primary Examiner  
Art Unit 2881  
February 6, 2007

Analysis and discussion provided in the Appendix written by Bernard Eng-Kie Souw – (attached to the Advisory Action mailed May 7, 2003).